



W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

STAFF DECISION SUMMARY

APPROVAL of:

Permit Application for the Sonoco Products Class 3 Landfill

This summary is in support of the South Carolina Department of Health and Environmental Control's (the Department) decision to approve the permit application for a new, non-commercial Class 3 Landfill location for the Sonoco Products Class 3 Landfill. The landfill is to be located near the intersection of North 5th Street (US Hwy 15 Business) and Cool Springs Road in Hartsville, Darlington County, SC. This landfill will be for the disposal of waste generated by Sonoco Products and consist mainly of ash (both coal and wood), paper products, plastics, and bailing wire. This summary report addresses comments received at the public hearing and throughout the public comment period.

SOLID WASTE MANAGEMENT

The principal law governing solid waste management in this state is the South Carolina Solid Waste Policy and Management Act of 1991 (the Act), S.C. Code Ann. § 44-96-10 et seq. One of the main purposes of the Act is to ensure those activities associated with solid waste management are executed in a manner adequate to protect human health, safety, and welfare of the environment.

The passage of the Act acknowledged a growing statewide need to address the generation, management, and disposal of solid waste. The Act gives the Department the responsibility of developing regulations that establish minimum standards for solid waste management facilities. Regulation 61-107.19, *Solid Waste Management: Solid Waste Landfills & Structural Fill* (the Regulation) became effective on May 23, 2008. This regulation outlines the requirements for permitting the design, construction, operation, maintenance, and closure of landfills. Please see the following web page:

<http://www.scdhec.gov/Agency/docs/lwm-regs/R61-107-19.pdf>

for a copy of the regulation.

In reaching this decision on the permit application, Department staff reviewed all information contained in the application, supplemental information submitted by the Applicant, and public comments. The Department has reviewed the application with respect to the requirements of the Act and the Regulation. The applicant has met the applicable requirements, and is approved at the proposed location.

LOCATION

The Department does not select the locations where landfills are to be sited. The applicant selects a site location. Also, the rules and regulations of local governments may influence where a landfill can or cannot be sited. The requirements of the Regulations and local land-use and zoning requirements are all key factors in the suitability of a landfill. As long as a given location meets the requirements of the Act and the Regulation, then a permit may be issued, regardless of whether a less objectionable location exists.

NUISANCE / HEALTH HAZARDS

Regulation 61-107.19, Part V, Section C.10 states, "Dust, odors, fire hazards, litter and vectors shall be effectively controlled so they do not constitute nuisances or hazards." The Applicant has provided plans for preventing these factors from becoming a nuisance or health hazard. However, should any of the plans prove to be inadequate and a nuisance or hazard situation is created, the landfill will be required to correct the situation and take measures to avoid a repeat occurrence. Failure to correct the situation would be a violation of the Regulation and the landfill may be subject to compliance/enforcement action by the Department. The individual factors are addressed as follows:

- **AIR QUALITY (DUST, ODOR, ASBESTOS)**

Generation of methane, hydrogen sulfide, or other noxious landfill gases is not expected to be a problem based on the waste stream limitations of this landfill. Generally, additional cover soil, or more frequent covering, is an acceptable response in the event foul odors become excessive and pose a nuisance to adjacent residences. The landfill also has a contingency to wet the waste if dust becomes an issue.

- **INCREASED PEST ACTIVITY / VECTORS**

The waste streams being placed in the landfill are not expected to provide conditions favorable for the breeding of pests and vectors. (A vector is an animal or insect that is mobile and therefore capable of transmitting disease.) Generally, additional cover soil, or more frequent covering, is an acceptable response to reduce the potential for vectors.

Comments were received about a mosquito problem during the 1st Phase of the process. DHEC staff visited the site shortly after the first public hearing. The Department determined that the insects were actually midges and investigated different potential sources.

NOISE

The Regulation does not contain any requirements relating to noise generation. Local zoning, land-use planning, and other local ordinances can be utilized to address such concerns.

COVER FREQUENCY

The current Sonoco Products Class 2 Landfill covers once every thirty (30) days. Since the waste stream is not changing, the Department is allowing the same cover frequency on the Class 3 Landfill. If conditions warrant, the Department has the authority to require the facility to cover more frequently.

COMPARISON OF THE SONOCO LANDFILL VS. THE COAL ASH BASIN AT LAKE ROBINSON

The waste stream at Sonoco Products Company and what was allowed to be placed at the Robinson Steam Generation Plant are different. The Robinson Steam Generation Plant was allowed to place low-level, radioactive material within its coal ash basin. The materials allowed to be disposed in Sonoco's landfill do not represent the same concerns as those disposed at the Robinson plant.

WILL THE WASTE COME FROM JUST SONOCO'S HARTSVILLE PLANT

Sonoco Products Company has agreed to only accept waste generated by their plant located in Hartsville, SC.

HOURS OF OPERATION

Sonoco Products Company has agreed to limit the hours of operation to no earlier than 7 am and to no later than 7 pm.

GROUNDWATER MONITORING

Both the Class 2 Landfill and the Class 3 Landfill have a monitoring well network. During operation of the Landfills, Sonoco Products is required to sample all of the monitoring wells twice during the year. Once the Class 2 Landfill closes, the monitoring frequency may be reduced to once a year during the post-closure care period of twenty (20) years for that facility. They are required to continue monitoring the Class 3 Landfill for thirty (30) years after it closes.

WATER SUPPLY WELL

During the Public Hearing, a comment was made concerning the proximity of a water supply well to the existing Class 2 Landfill. The groundwater monitoring network includes an up-gradient monitoring well that is located between the Class 2 Landfill and the water supply well. No constituents of concern are being detected in the up-gradient monitoring well that are above the regulatory levels that would require further action.

BUFFERS

The Regulations require a 1,000 feet buffer to all residences, schools, churches, day cares, and hospitals. During the Public Hearing a few churches and schools were mentioned as being in the area of the proposed landfill. The Department checked the distances to each and found them to be the following:

Whispering Pines Baptist Church is about 2,400 feet from the landfill
Kay Branch Missionary Baptist Church is about 2,800 feet from the landfill
Emmanuel Christian School is about 4,500 feet from the landfill
Emmanuel Baptist Church is about 5,300 feet from the landfill
Hartsville Church of God of Prophecy is about 7,500 feet from the landfill
North Hartsville Elementary School is about 9,800 feet from the landfill

In addition, there was a comment received about the proximity of houses to the existing Class 2 Landfill. The Class 2 Landfill was permitted under previous regulations. The location requirements found in the older regulations were not as stringent as the current regulation.

GROUNDWATER PROTECTION

A Class 3 Landfill is required to have a liner below the waste. Atop the liner is a leachate collection system. Any water that comes into contact with the waste is directed to the leachate collection system. The leachate is then pumped to the wastewater treatment units operated by Sonoco Products prior to being discharged. These measures are meant to increase the protection of groundwater.

WASTE STREAMS

The permit limits the waste stream to the following wastes: Paper rejects, boiler ash, hydropulper rejects, pallets and wood, semi-solid glue, construction debris, plastics (which include pipe and PVC), styrofoam, floor sweepings, resin solids, crushed/dented metal containers, metal shavings/sludge, wire, staples, sand, glass, and all materials listed in R.61-107.19, Appendix I.

Sonoco Products Company operates two boilers at their facility. One of the boilers is a biomass boiler that burns only wood. The other boiler is a mixed fuel boiler that burns a mixture of paper rejects, plastics, coal, wood, limestone, and other permitted fuels. The ash from those boilers, along with the items listed above, are disposed in their permitted landfill. Of the waste currently disposed in the Class 2 Landfill, about 60% is non-coal ash, about 30% consists of paper rejects and non-food waste, and about 10% of the waste disposed is coal ash.

FLARE

The flare that burns methane at the Sonoco Products Company is currently covered by Air Permit #0820-0012. There are currently no violations related to this permit.